September 10, 2001

VIA HAND DELIVERY
Hon. Charles James
Assistant Attorney General
Antitrust Division
U.S. Department of Justice
Washington, DC 20530

Re: Business Review Letter Request

Dear Mr. James:

On behalf of the American Welding Society, we hereby request a Business Review Letter on the matter described below, pursuant to the Department’s Business Review Procedure, 28 C.F.R. §50.6.

Introduction

The American Welding Society (the “Society”) is a nonprofit organization exempt from federal income taxation under §501(c)(3) of the Internal Revenue Code. The Society has approximately 50,000 individual members and 300 corporate members. The individual members are employed in a wide range of industries, including manufacturing, fabrication, transportation, energy, aerospace, and shipbuilding. The company members are largely manufacturers of welding equipment and supplies, as well as end users of welding related equipment. The two member companies particularly relevant to this request are the Lincoln Electric Company and the Miller Electric Company.

Of the Society’s many activities, one of the most important is the publication of technical codes, standards, specifications, guides, and recommended practices related to welding and joining. These publications are developed by technical committees of the Society. These committees are comprised of Society members who serve on a volunteer basis. The Society is accredited as a standards developer by the American National Standards Institute.
Background

A "robotic welding cell" is made up of several pieces of equipment or devices that work together to produce a weld on an automated basis. In order for the cell to weld, the devices in the cell must communicate with each other. Currently, most welding equipment communications use dedicated wires, one per message type, bundled into a cable. Cables are connected to the equipment with connectors that are unique to each piece, and unique to individual vendors' preferences. Therefore, to put together a welding cell, someone must act as an integrator and ensure that interfaces of the equipment are compatible with each other. Once an integrator has developed a solution for a particular set of equipment, it becomes expensive to change any component because each component has a unique interface, and because similar components of different vendors have different interfaces.

![Diagram of devices in a robotic welding cell](image)

Figure 1: Devices typically found in a robotic welding cell and the communication paths between them. Cells may not have all of the devices shown here.

The consequences of interface incompatibility fall hardest on the consumers of welding cells, but also on integrators and small, specialty equipment makers. The consumers of welding cells will invest considerable sums of money when they purchase a particular welding cell; they also must train personal on how to maintain and use the cell. If in a few years a particular piece equipment in the cell becomes obsolete, the consumer of the cell will likely incur high costs to adapt a new device, or buy a whole new cell, or just put up with the old technology. Small, specialty equipment makers are faced with implementing several interfaces for their devices to be compatible with different integrators needs.
Specification Development to Date

The need for a specification for the transfer of information between devices in a robotic welding cell was recognized by the Society's A9B Subcommittee on the Exchange of Welding Information Between Intelligent Systems at a meeting in August 1998. The draft specification is called A9.4, Data Structures and Protocols for the Exchange of Intra-cell Welding Information.

At a meeting in April 1999, members of the Subcommittee who were representatives of the Lincoln Electric Company ("Lincoln"), offered to allow the Subcommittee to use a Lincoln product, called "Arclink," as the basis for the specification. The single consideration was that the implementation of the specification would not be incompatible with the Arclink specification. The Society specification could extend Arclink, however. In other words, any device that met the Arclink specification would automatically meet the Society specification, but because of the possible extensions to the specification, the reverse need not be true. Lincoln offered to provide technical assistance to anyone interested in implementing the standard, and has agreed not to enforce any patent or proprietary rights to Arclink in connection with use of the specification.

In June 1999, the members of the Subcommittee from Lincoln gave another presentation on Arclink. At the next meeting, in September 1999, the Subcommittee heard a presentation on DeviceNet, an alternative product to Arclink that is promoted by the Open DeviceNet Vendors Association. Also in connection with this meeting, Lincoln prepared and submitted a paper entitled, "Arclink vs. DeviceNet," and the Open DeviceNet Vendors Association submitted a written reply.

After discussion and consideration of the technical merits, the Subcommittee decided to proceed with Arclink rather than DeviceNet. Several members of the Subcommittee, most notably representatives from the Miller Electric Company ("Miller"), expressed a preference for DeviceNet.

Objections By Miller

Representatives of Miller have objected to adoption of Arclink by the Subcommittee in Subcommittee meetings, and through correspondence.

Miller has argued that DeviceNet, the competing product, is widely accepted and used in manufacturing facilities in many industries, while ArcLink is not. This, coupled with the fact that ArcLink is a proprietary product of Lincoln, will result in the Subcommittee developing a standard that will not be accepted by industry, according to Miller.

To the extent that the standard does gain acceptance, however, Miller also argues that a standard based on the proprietary product of Lincoln will give Lincoln a competitive advantage.
Current Status

The specification has not been approved or finalized, and remains in draft form. Currently, the Subcommittee has suspended all substantive action on the specification pending the outcome of this Business Review Letter request.

Conclusion

Lincoln and Miller are direct competitors, and they are two of the largest domestic welding equipment manufacturers. Miller has voiced strong opposition to ArcLink, and prefers DeviceNet. Miller believes that using ArcLink as a basis for the specification will give Lincoln a competitive advantage. Miller also maintains that DeviceNet is much more widely accepted in industry than ArcLink.

Assuming that the Subcommittee adheres to the procedures mandated by the American National Standards Institute, and assuming the Committee has a reasonable and good faith basis to believe, from a technical standpoint, that ArcLink is preferable as the basis for the specification, we request a statement of the Antitrust Division’s current enforcement intentions should the Society proceed with the development of the specification described herein, based on ArcLink rather than DeviceNet, even if adoption of the specification would give Lincoln a competitive advantage and even if the technology within the specification is not currently widely used in the industry.

Thank you for your consideration of this request. Please let me know if you need any further information.

Sincerely,

Hugh K. Webster

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